

Basal Shear Stress for Pine Island and Thwaites glaciers, Antarctica

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We used control-method inversions to determine the basal shear stress beneath Pine Island and Thwaites glaciers. We used an existing inversion algorithm that has been applied successfully to the Ross Ice and Filchner-Ronne Ice Streams. These inversions were constrained by several sources of data. For bed topography, we relied on data from the recent Airborne geophysical survey of the Amundsen Sea Embayment, Antarctica (AGASEA). Surface topography was derived from a combination of ICESAT and ERS altimeter data. Finally, we determined surface velocity using ERS InSAR data.